30

## **CLAIMS**

- 1. A method of treating a mammal for atherosclerotic disease comprising administering to the mammal a Factor XIIIa inhibitor.
- 2. A method according to claim 1, wherein the Factor XIIIa inhibitor is a Factor XIII(a) Lp(a)-matrix specific inhibitor.
  - 3. A method according to claim 1, wherein the Factor XIIIa inhibitor is a Factor XIII(a) Lp(a)-fibrin specific inhibitor.
    - 4. A method according to claim 1, wherein the mammal is a human.
    - 5. A method of identifying an inhibitor of Factor XIIIa comprising:
- 10 (a) incubating an Lp(a) component, a matrix component, and Factor XIIIa in the presence or absence of a test inhibitor;
  - (b) determining whether complex formation between the Lp(a) component and the matrix component was inhibited in the presence of the test inhibitor; and
- (c) identifying as a Factor XIIIa inhibitor the test inhibitor that inhibited complex formation.
  - 6. A method according to claim 5, wherein the matrix component is selected from the group consisting of fibrin and a fibrin component.
    - 7. A method of identifying a Factor XIIIa inhibitor comprising:
- 20 (a) incubating Factor XIIIa and a first substrate pair comprising an Lp(a) component and a matrix component in the presence or absence of a test inhibitor;
  - (b) incubating Factor XIIIa and a second substrate pair in the presence or absence of the test inhibitor, wherein the second substrate pair comprises any two components that are Factor XIIIa substrates for complex formation,
- 25 (c) determining whether inhibition of complex formation between the first substrate pair was greater than inhibition of complex formation between the second substrate pair; and
  - (d) identifying as a Factor XIIIa inhibitor the test inhibitor that provided greater inhibition of complex formation between the first substrate pair than between the second substrate pair.
  - 8. A method according to claim 7, wherein the matrix component is selected from the group consisting of fibrin and a fibrin component.

9. A method according to claim 7, wherein the second substrate pair comprises a first member selected from the group consisting of fibrin and a fibrin component and a second member selected from the group consisting of fibrin and a fibrin component.

ę. ·

5